

Remarks/Arguments:

This communication is in response to the Office Action made Final dated February 22, 2006. Claims 1 - 15 are pending. Claims 1 - 11 and 15 stand rejected at present. Claims 12 - 14, were previously withdrawn from consideration. Claims 1, 5 and 15 are amended herein, and claim 2, 3, 4, 7, and 11 are canceled.

The specification was objected to for certain informalities by the examiner. The specification is corrected herein to address the objection. Also, Applicants appreciate examiner's acceptance of the drawings previously submitted.

Claims 1 - 2, 7 - 9, and 15 were rejected under 35 U. S. C. 102(b) as being anticipated by Cantu et al. in U.S. Patent 4,957,165. Independent claim 1 has been amended herein, and claims 8, 9, and 15 depend upon claim 1. Claims 2 and 7 are canceled. Cantu '165 discloses components based upon condensation products of hydroxyacetic (glycolic) acid with itself or with compounds containing other hydroxy, carboxylic acid, or hydroxycarboxylic acid moieties (column 2, lines 27 - 32). Applicant's claims are called to a solid acid-precursor selected from the group consisting of lactide, polylactic acid, and mixtures thereof. These are clearly distinguishable. Since Cantu '165 does not contain all of the elements of, and as arranged in, Applicant's claims, Cantu '165 does not anticipate Applicant's claims.

Claims 1 - 5, 7, 10 - 11, and 15 were rejected under 35 U. S. C. 102(b) as being anticipated by Cantu et al. in U.S. Patent 4,986,354. Independent claim 1 has been amended herein, and claims 5, 10, and 15 depend upon claim 1. Claims 2 - 4, 7 and 11 are canceled. Applicants note that Cantu '354 discloses chemicals encapsulated within microcapsules where the microcapsules are formed from the low molecular weight condensation product of hydroxyacetic (glycolic) acid with itself, or with other compounds containing hydroxy-, carboxylic acid- or hydroxycarboxylic acid moieties (column 1, lines 51 - 56), where the moieties with which the hydroxyacetic (glycolic) acid is co-condensed include but are not limited to lactic acid, tribasic acids such as citric

acid, dibasic acids such as adipic acid, and diols such as ethylene glycol and polyols (column 2, lines 8 – 15). While Cantu '354 discloses self condensed hydroxyacetic (glycolic) acid, or hydroxyacetic (glycolic) acid co-condensed with lactic acid, Cantu fails to disclose solid acid-precursor which is a lactide, polylactic acid, or mixtures thereof.

Also, Cantu '354 does not disclose physically mixing two separate solids, the first being a solid acid-precursor and the second, a solid acid-reactive material, wherein the mixture is two separate particles. Cantu '354 requires that the condensed acid encapsulate a chemical to form one solid capsule.

As such, Cantu '354 fails to anticipate Applicant's claim since Cantu does not clearly and unequivocally disclose all elements of, and as arranged in Applicant's claims.

Claims 1 - 7, 10, 11, and 15 were rejected under 35 U. S. C. 103(a) as being unpatentable over Cantu et al. in U.S. Patent 4,986,354. Independent claim 1 has been amended herein. Insofar that the examiner still maintains the rejections, Applicants respectfully traverse the rejection. The intended function taught in Cantu '354 is placement of condensed acid based microcapsules in a well bore and/or subterranean oil formation where oil field chemicals are released upon hydrolysis of the condensed acid capsule (column 1, lines 42 – 47). If Cantu '354 was modified in such a way that the chemical was physically separate from the condensed acid based microcapsule, the release of the chemical would be directly into the wellbore, and not be released due to hydrolysis of the condensed acid. The intended function of Cantu '354 would be destroyed. If a proposal for modifying the prior art in an effort to attain the claimed invention causes the art to become inoperable or destroys its intended function, then the requisite motivation to make the modification would not have existed. See *In re Fritch*, 972 F.2d at 1265 n.12, 23 U.S.P.Q.2d at 1783 n.12 ("A proposed modification [is] inappropriate for an obviousness inquiry when the modification render[s] the prior art reference inoperable for its intended purpose."). Therefore, without the requisite motivation to modify Cantu '354, Applicant's claimed invention is non-obvious, and Applicants request withdrawal of the rejection.

Claims 1, 8 – 9 and 15 were rejected under 35 USC 103(a) as being unpatentable over Cantu et al. (4,957,165) in view of Johnson et al. (5,325,921). Independent claim 1 has been amended herein to include features of canceled claim 7. To the extent that the examiner maintains the rejection, Applicants respectfully traverse. Cantu '165 teaches a fluid loss control agent formed from a condensation product of hydroxyacetic (glycolic) acid, that the condensation product can degrade to form acid, that it is essential that the acid is used to substantially completely break the gel in the gel filter pad which is formed during treatment (column 3, lines 29 – 33), and that the need for a separate gel breaker step is eliminated (column 3, lines 36 – 38). Johnson '921 teaches a method of hydraulic fracturing in which a solid acid-reactive material in the pad is used to form a filter cake to prevent fluid loss, proppant is then placed, and then the filter cake is removed by physical means (flowback) after the treatment. To the extent that the solid acid-reactive material of Johnson '921 is mixed with the glycolic acid condensation product of Cantu '165, the effectiveness of Cantu '165 is diminished. Ultimately, if the solid acid-reactive material of Johnson '921 is added in such an amount that it neutralizes the acid generated due to degradation of the glycolic acid condensation product of Cantu '165, no acid shall be available to break the gel, and the need for a separate gel breaker step is then required. This would destroy the intended function of the Cantu '165. Hence, there is no motivation to combine Cantu '165 with Johnson '921, and Applicants respectfully request withdrawal of the rejection.


Claims 1, 7, and 15 were rejected under 35 USC 103(a) as being unpatentable over Cantu et al. (4,957,165) and in view of Lee (6,817,414). Cantu '165 teaches a fluid loss control agent formed from a condensation product of hydroxyacetic (glycolic) acid, that the condensation product can degrade to form acid, that the acid is used to substantially completely break the gel in the gel filter pad which is formed during treatment, and that the need for a separate gel breaker step is eliminated. Combining the teachings of Lee '414 with Cantu '165 would result in polylactic acid which hydrolyzes to form an acid used to substantially completely break the gel, thus eliminating the need

for a separate gel breaker step. This is quite different than Applicant's claimed invention, where the generated acid is used to dissolve, and is neutralized by, the acid-reactive material, rather than being available break the gel.

Claims 1, 4, 7, and 9 – 10 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4 – 5, 8, 10, and 21 – 23 of copending Application No. 10/605,784. A Terminal Disclaimer is filed herewith to overcome the rejection.

In light of the above amendments and remarks, Applicants respectfully request that a timely Notice of Allowance be issued in this case. If the Examiner believes that the prosecution of the application would be facilitated by a telephone interview, Applicants invite the Examiner to contact the undersigned at 281-285-8606. The Commissioner is authorized to charge any additional required fee, or credit any excess fee paid, to Deposit Account 04-1579 (56.0758).

Respectfully submitted,


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Date: April 20, 2006
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